



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Lothar Kempen  
Assignee: Maven Technologies, LLC  
Title: APPARATUS AND METHOD FOR IMAGING  
Serial No.: 10/602,555 Filing Date: June 23, 2003  
Examiner: Hoa Q. Pham Group Art Unit: 2877  
Docket No.: M-15218-3C US Confirmation No. 1187

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR § 1.97(B)**

Mail Stop AMENDMENT  
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P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97(c)**

Dear Sir:

Pursuant to 37 CFR § 1.56, § 1.97 and § 1.98, the document listed on the accompanying Substitute for form 1449/PTO is called to the attention of the Examiner for the above patent application. A Copy of the documents are enclosed.

Citation of the above documents shall not be construed as:

1. an admission that the documents are necessarily prior art with respect to the instant invention;

2. a representation that a search has been made, or

3. an admission that the information cited herein is, or is considered to be

material to patentability as defined in §1.56(b).

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(949) 752-7040  
FAX (949) 752-7049

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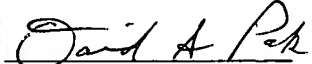
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The Commissioner is authorized to deduct \$180.00 from the undersigned's Deposit Account No. 50-2257. Please deduct any additional fees from, or credit any overpayment to the above-noted Deposit Account.

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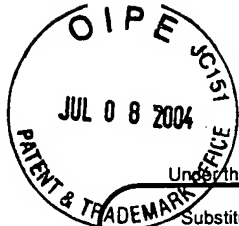


David S. Park  
Attorney for Applicant(s)  
Reg. No. 52,094

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MACPHERSON, KWOK CHEN  
& HEID LLP

2402 MICHELSON DRIVE  
SUITE 210  
IRVINE, CA 92612  
(949) 752-7040  
FAX (949) 752-7049





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Application Number	10/602,555
Filing Date	06/23/2003
First Named Inventor	Lothar Kempen
Art Unit	2877
Examiner Name	Hoa Q. Pham
Attorney Docket Number	M-15218-3C US

Sheet 1 of 7

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 2004/0023247A1	02-05-2004	Xu et al.	
		US- 2004/0012676A1	01-22-2004	Weiner et al..	
		US- 2004/0030504A1	02-12-2004	Helt et al.	
		US- 2004/0038268A1	02-26-2004	Pirrung et al.	
		US- 2004/0002167A1	01-01-2004	Andersson et al.	
		US- 2002/0182717A1	12-05-2002	Karlsson	
		US- 2002/0154311A1	10-24-2002	Ivarsson	
		US- D472,644S	04-01-2003	Dawson et al.	
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		US- 6,589,798B1	07-08-2003	Loefas	
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		US- 6,143,574	11-07-2000	Karlsson et al.	
		US- 6,127,183	10-03-2000	Ivarsson et al.	
		US- 6,207,381B1	03-27-2001	Larsson et al.	

**FOREIGN PATENT DOCUMENTS**

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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		WO 03/102580A1	12-11-2003	Saeften et al.		
		WO 03/056337A1	07-10-2003	Loefas		
		AU 742417	02-11-2000	Ivarsson		
		WO 98/32002	07-23-1998	Herbai et al.		
		WO 97/19375	05-29-1997	Ivarsson et al.		
		WO 96/38729	12-05-1996	Wahlstroem et al.		

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Sheet 2 of 7

**Complete if Known**

Application Number	10/602,555
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First Named Inventor	Lothar Kempen
Art Unit	2877
Examiner Name	Hoa Q. Pham
Attorney Docket Number	M-15218-3CUS

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		US- 2002/0019019 A1	02-14-2002	Hamalainen et al.	
		US- 6,143,513	11-07-2000	Loefas	
		US- 5,972,612	10-26-1999	Malmqvist et al.	
		US- 6,200,814 B1	03-13-2001	Malmqvist et al.	
		US- 6,008,893	12-28-1999	Roos et al.	
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		US- 5,164,589	11-17-1992	Sjoedin	
		US- 5,313,264	05-17-1994	Ivarsson et al.	
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		US- 2003/0067612A1	04-10-2003	Ivarsson	
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		US- 4,256,834	03/17/1981	Zuk et al.	
		US- 5,922,604	07/13/1999	Stapleton et al.	
		US- 6,008,010	12/28/1999	Greenberger et al.	
		US- 6,045,996	04/04/2000	Cronin et al.	

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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
		WO 96/08720	03-21-1996	Sternesjoe et al.		

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)	<b>Application Number</b>		10/602,555
	<b>Filing Date</b>		06/23/2003
	<b>First Named Inventor</b>		Lothar Kempen
	<b>Art Unit</b>		2877
	<b>Examiner Name</b>		Hoa Q. Pham
	<b>Attorney Docket Number</b>		M-15218-3C US
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**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		TADASHI SAITOH, ET AL. "Optical Characterization of Very Thin Hydrogenated Amorphous Silicon Films Using Spectroscopic Ellipsometry"; Japanese Journal of Applied Physics; Vol. 30, No. 11B, November 1991. pp. L1914-L1916	
		"Handbook of Optics", Michael Bass Editor in Chief, by The Optical Society of America; Vol. 1; pp. 4.23, 4.24; 1995 McGraw-Hill, Inc.	
		BASS, ET AL. "Handbook of Optics", by The Optical Society of America; Vol. 1; Section 41.10; 1995 McGraw-Hill, Inc.	
		GANG JIN ET AL. "Imaging Ellipsometry Revisited: Developments for Visualization of Thin Transparent Layers on Silicon Substrates", American Institute of Physics, Rev. Sci. Instrum., pp. 2930-2936, August 1996.	
		MAX BORN ET AL. "Principles of Optics – Electromagnetic Theory of Propagation, Interference and Diffraction of Light", Sixth Edition, pp. 47-51 Pergamon Press	
		EGGINS, "Biosensors: An Introduction", pp. 112-113, 1987 John Wiley & Sons	
		DANNY VAN NOORT ET AL. "Monitoring Specific Interaction of Low Molecular Weight Biomolecules on Oxidized Porous Silicon Using Ellipsometry", Biosensors & Bioelectronics Vol. 13, No.3-4 pp. 439-449, 1998 Elsevier Science, S.A. Great Britain	
		GANG JIN ET AL. "Imaging Ellipsometry for Biosensor Applications" Transducers '95. Eurosensors IX, Digest of Technical Papers Vol 2, Sessions A7-D13, Papers No 232-496 pp. 509-512, Stockholm, Sweden, June 1995	
		JINYU WANG "Waveguide Ellipsometry Biosensors: Concept and Preliminary Analysis", SPIE Vol. 1648, Fiber Optical Medical and Fluorescent Sensors and Applications pp. 44-50, 1992	
		ULF JONSSON ET AL. "Flow-Injection Ellipsometry – An in Situ Method for the Study of Biomolecular Adsorption and Interaction at Solid Surfaces," Colloids and Surfaces, 13 (1985) pp. 333-339, 1985 Elsevier Science Publishers BV, Amsterdam, The Netherlands	

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		JONSSON, ULF ET AL. "Biosensors Based on Surface Concentration Measuring Devices-The Concept of Surface Concentration" Progress in Colloid and Polymer Sci. Vol. 70, pp. 96-100, 1985	
		SCHENA, MARK "DNA Microarrays: A Practical Approach" Edited by Mark Schena, Department of Biochemistry, Beckman Center, Stanford University Medical Center, Stanford, USA, Oxford University Press, 1999	
		SCHEMA, PhD. MARK, "Microarray Biochip Technology" TeleChem International, Inc., Sunnyvale, California, USA, A BioTechniques Books Publication, Eaton Publishing, pp. 10-11, 2000	
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		HAKEN NYGREN ET AL. "Determination by Ellipsometry of the Affinity of Monoclonal Antibodies", Journal of Immunological Methods, 92, pp.219-225, 1986 Elsevier Science Publishers Ltd.	
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		A. BRECHT ET AL. "Biosensors: Fundamentals, Technologies and Applications" GBF Monographs, Vol. 17, pp.174-178, 1991 Germany	

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		HAKAN NYGREN ET AL. "Kinetics of Antibody-Binding to Surface-Immobilized Antigen: Influence of Mass Transport on the Enzyme-Linked Immunosorbent Assay (ELISA)", Journal of Colloid and Interface Science, Vol. 107, No. 2 pp. 560-566, October 1985 Academic Press, Inc.	
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		DR. RUDOLF OLDENBOURG "Metamorph Imaging System", <a href="http://www.image1.com/products/metapolscope/">http://www.image1.com/products/metapolscope/</a> Universal Imaging Corporation Last Updated 10 Jun 1999 pp.1-2	
		DR. RUDOLF OLDENBOURG "A new view on polarization microscopy", Nature, Vol. 381, pp.811-812, 27 June 1996	

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		CLIFFORD C. HOYT ET AL. "Structural analysis with quantitative birefringence imaging", American Laboratory, pp. 34-42, July 1999	
		DIRK HONIG ET AL. "Direct visualization of monolayers at the air-water interface by Brewster angle microscopy", J. Phys. Chem., pp. 4590 & 4592, 1991 American Chemical Society	
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